

Amendment to the Claims:

Claims 1-62 (Canceled)

63. (Currently amended) A transgenic mouse whose genome comprises a null disruption in an endogenous lymphoid specific GPCR gene allele; wherein said null allele comprises exogenous DNA, said exogenous DNA comprising a gene encoding a visible marker, wherein said gene is capable of expression in the spleen, ~~wherein where the disruption is homozygous, the transgenic mouse lacks production of functional lymphoid specific GPCR protein, and exhibits lymphocyte cellular infiltration of lung tissue.~~
64. (Currently amended) The ~~A~~ transgenic mouse of claim 63 ~~whose genome comprises a disruption in an endogenous lymphoid specific GPCR gene, wherein where the disruption the mouse is homozygous for said null allele, the transgenic mouse lacks production of functional lymphoid specific GPCR protein, and exhibits lymphocyte cellular infiltration of pancreatic tissue.~~
65. (Currently amended) ~~A~~ The transgenic mouse of claim 64, ~~wherein whose genome comprises a disruption in an endogenous lymphoid specific GPCR gene, wherein where the disruption is homozygous, the transgenic the mouse lacks production of functional lymphoid specific GPCR protein, and exhibits, relative to a wild-control mouse, lymphocyte cellular infiltration of liver tissue and/or pancreatic tissue.~~
66. (Currently amended) ~~A~~ The transgenic mouse of claim 64, ~~whose genome comprises a disruption in an endogenous lymphoid specific GPCR gene, wherein where the disruption is homozygous, the transgenic the mouse lacks production of functional lymphoid specific GPCR protein, and exhibits, relative to a wild-type control mouse, cellular infiltration of stomach tissue by at least one of the following types of cells: lymphocytes, granulocytes or plasma cells.~~
67. (Currently amended) A cell or tissue isolated from the transgenic mouse of claim 63, ~~claim 64, claim 65, or claim 66.~~
68. (Currently amended) The ~~A~~ transgenic mouse of claim 63, ~~wherein the mouse is comprising a heterozygous for said null allele~~ disruption in an endogenous lymphoid specific GPCR gene, wherein, upon breeding, the disruption in a homozygous state inhibits production of functional lymphoid specific GPCR protein resulting in a transgenic mouse exhibiting at least

~~one of the following phenotypes: lymphocyte infiltration of lung tissue, lymphocyte infiltration of pancreatic tissue, lymphocyte infiltration of liver tissue or lymphocyte, granulocyte or plasma cell infiltration of stomach tissue.~~

69. (Previously presented) A cell or tissue isolated from the transgenic mouse of claim 68.

70. (Currently amended) A method of producing a transgenic mouse of claim 63 ~~comprising a disruption in an endogenous lymphoid specific GPCR gene~~, the method comprising:

(a) introducing a targeting construct capable of disrupting the endogenous lymphoid specific GPCR gene into a murine embryonic stem cell;

(b) selecting for the murine embryonic stem cell that has undergone homologous recombination;

(c) introducing the murine embryonic stem cell selected for in step (b) into a mouse blastocyst;

(d) implanting the resulting blastocyst into a pseudopregnant mouse, wherein the resultant mouse gives birth to a chimeric mouse; and

(e) breeding the chimeric mouse to produce the transgenic mouse;

~~wherein where the disruption is homozygous, the transgenic mouse lacks production of functional lymphoid specific GPCR protein and exhibits at least one of the following phenotypes: lymphocyte infiltration of lung tissue, lymphocyte infiltration of pancreatic tissue, lymphocyte infiltration of liver tissue or lymphocyte, granulocyte or plasma cell infiltration of stomach tissue.~~

71. (Canceled)

72. (New) The transgenic mouse of claim 63 wherein said exogenous DNA further comprises a gene encoding a selection marker.

73. (New) The transgenic mouse of claim 72 wherein said gene is a neomycin resistant gene.

74. (New) The transgenic mouse of claim 63 wherein said gene is lacZ.

75. (New) The transgenic mouse of claim 63 wherein said gene is capable of expression in the lymph nodes.

76. (New) A method of identifying an agent capable of modulating activity of a lymphoid specific GPCR gene or lymphoid specific GPCR gene expression product, the method comprising:

(a) administering a putative agent to the transgenic mouse of claim 1;

- (b) administering the agent to a wild-type control mouse; and
- (c) comparing a physiological response of the transgenic mouse with that of the control mouse;
- (d) wherein a difference in the physiological response between the transgenic mouse and the control mouse is an indication that the agent is capable of modulating activity of the gene or gene expression product.